SIDOROV, N.Ye., prof.; KORCHEMKIN, A.M., kand.med. nauk

Review of I.I.Il'in's book "Nongonococcal venereal urethritis in men." Kaz. med. zhur. 4:85-86 Jl-Ag'63 (MIRA 17:2)

KORCHEMKIN, A.M., kand.med.nauk

Forms and complications of trichomonal urethritis in males. Sov.med. 28 no.11:131-138 N '65. (MIRA 18:12)

1. Kazanskiy gorodskoy kozhno-venerologicheskiy dispanser (glavnyy vrach M.N.Petukhov) i 1-ya kafedra akusherstva i ginekologii (zav. - prof. N.Ye.Sidorov) Kazanskogo instituta usovershenstvovaniya vrachey.

KORCHEMKIN, A.Ye.

KOCHANOVSKIY, N.Ya., kandidat tekhnicheskikh nauk; LYUBAVSKIY, K.V., professor, doktor tekhnicheskikh nauk; KORCHEMKIN, A.Ye., inzhener.

Decision of the conference on welding in an atmosphere of protective gasses. Svar. proizv. no.9:3 of cover S '56. (MLRA 9:11)

1. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo instituta elektrosvarochnogo oborudovaniya po nauchnoy chasti (for Kochanovskiy) 2. Predsedatel' sektsii svarki TSentral'nogo pravleniya nauchno-tekhnicheskogo otdela MASHPROM (for Lyubavskiy).
(Electric welding)
(Protective atmospheres)

KORCHEMKIN, A. Ye.

AID P - 5282

Subject : USSR/Engineering

Card 1/2 Pub. 107-a - 18/18

Authors : Kochanovskiy, N. Ya., Kand. of Tech. Sci., K. V. Lyubavskiy, Dr. of Tech. Sci., A. Ye. Korchemkin, Eng. (Members of the Presidium of the Convention)

Title : Convention on welding in the atmosphere of various protective gases.

Periodical : Svar. proizv., 9, 33, S 1956

Abstract : A brief report on Convention Proceedings with reports on welding under protection of argon, helium, carbon dioxide and nitrogen, and other related matters, held in Leningrad, May 8 and 9, 1956.

Institutions: (participating in the Convention) - All-Union Scientific Research Institute of Electrical Welding Equipment (VNIIESO), Scientific Research Institute of Aviation Technology (NIAT), Central Scientific Research Institute

AID P - 5282

Svar. proizv., 9, 33, S 1956

Card 2/2 Pub. 107-a - 18/18

of Machine-Building Technology (TsNIITMASh), All-Union Scientific Research Institute of the Autogenous Treatment of Metals (VNIIAvtogen), the Laboratory for Electric Welding Machines of the Academy of Sciences of the USSR, Institute of Electromechanics of the Academy of Sciences of the USSR, Leningrad Polytechnic Institute, and representatives from various plants, such as "Elektrik", im. Lenin, Kirov, etc.

Submitted : No date

ALEKSEYEVA, O.G.; KLIMOVA, Ye.N.; KORCHEMKIN, B.I.; PETROVICH, I.K.

Initial manifestations of injuries in dogs exposed to daily administrations of Sr^{90}. Med.rad. 6 no.8:57-64 Ag '61. (MIRA 14:8)

(STRONTIUM—ISOTOPES) (RADIATION SICKNESS)

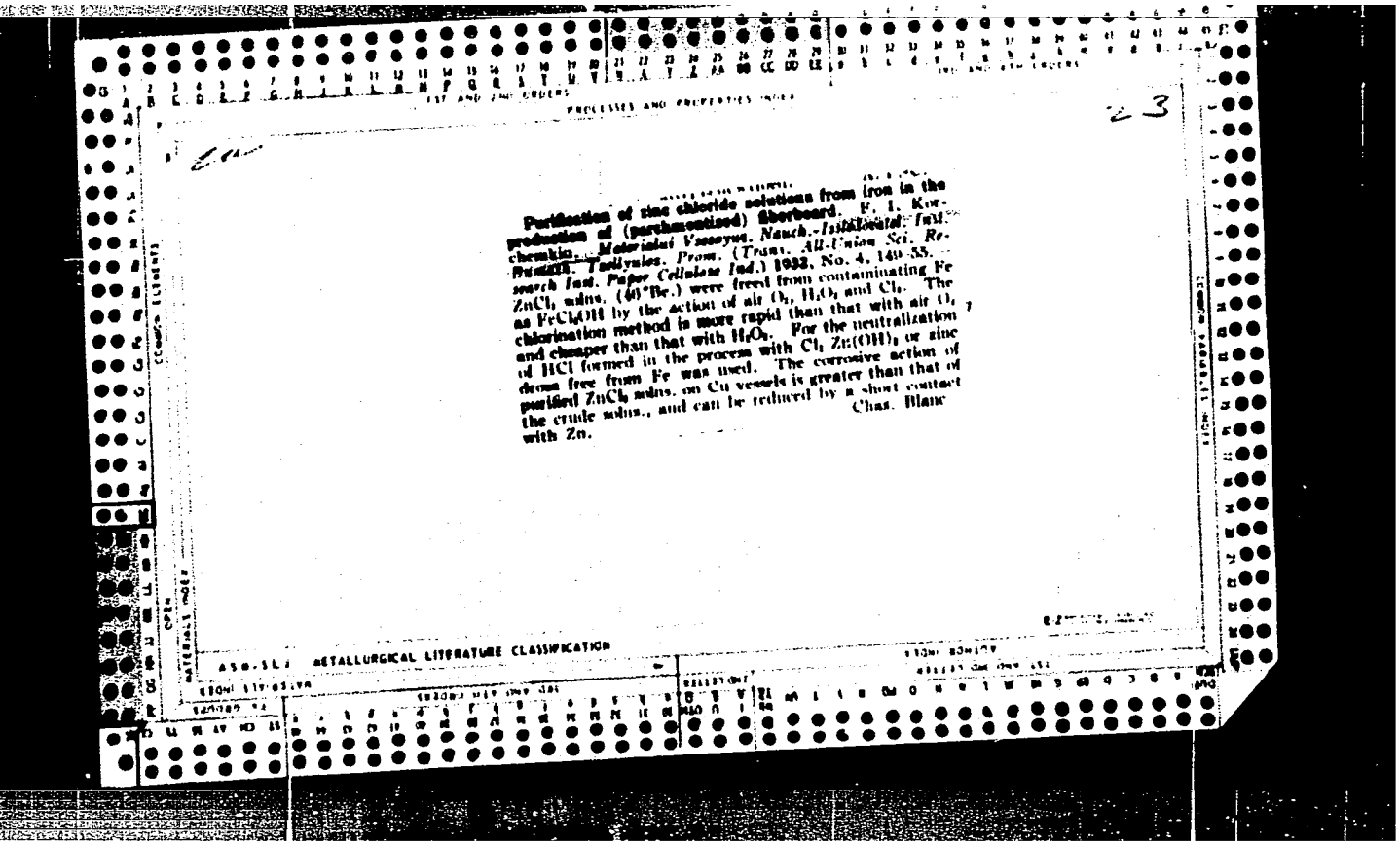
KORCHEMKIN, B.M.; RAPOPORT, Yu.O.; GAYDUKOV, A.A.

Pneumatic transportation of molding sand. Lit. proizv. no.2:12-13 F '58. (MIRA 11:3)
(Sand, Foundry) (Pneumatic-tube transportation)

KORCHEMKIN, B. N.

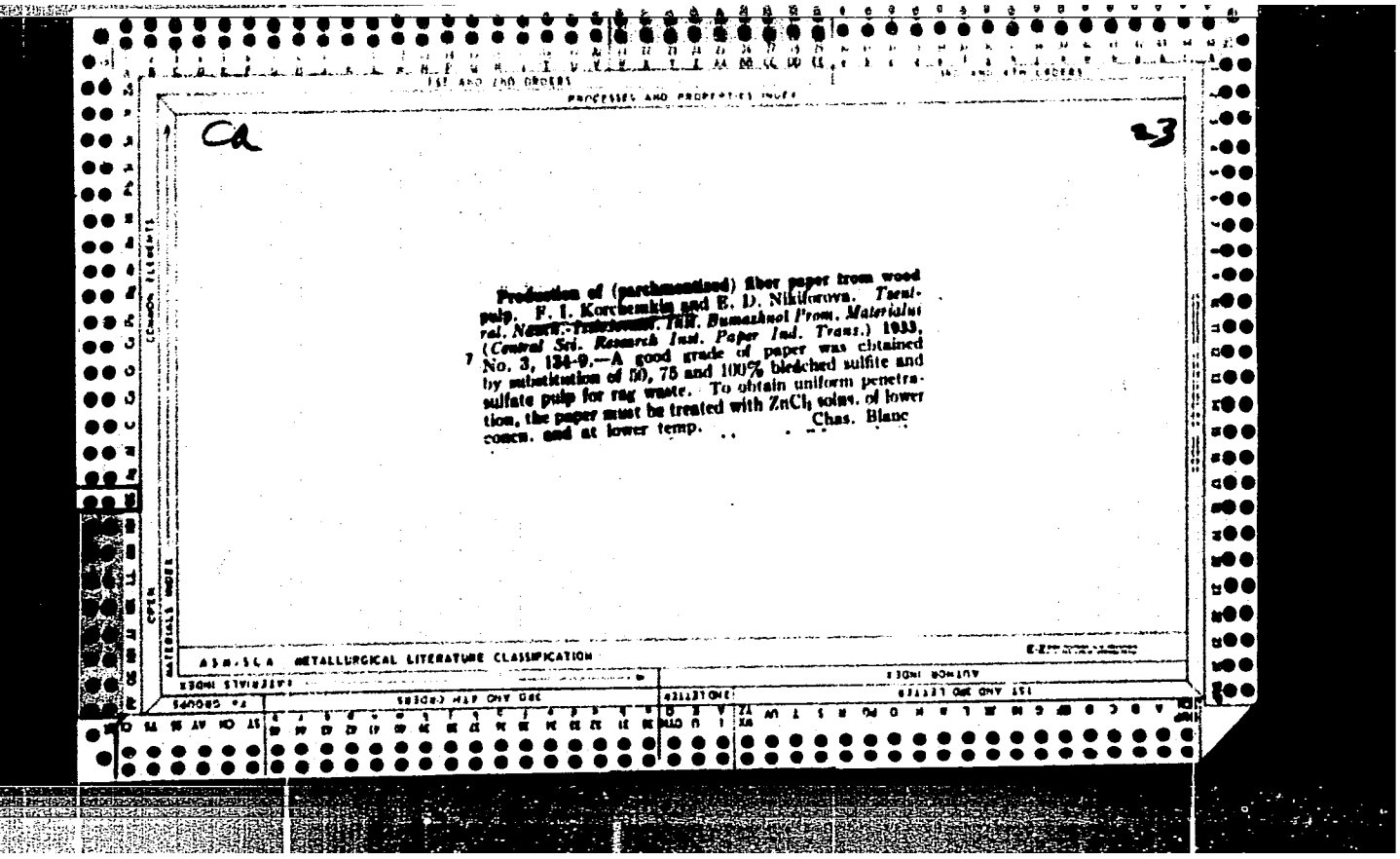
Korchemkin, B. N. Military pontoon bridges Moskva, 1940.

415 p. (49-30966) UG335.K6

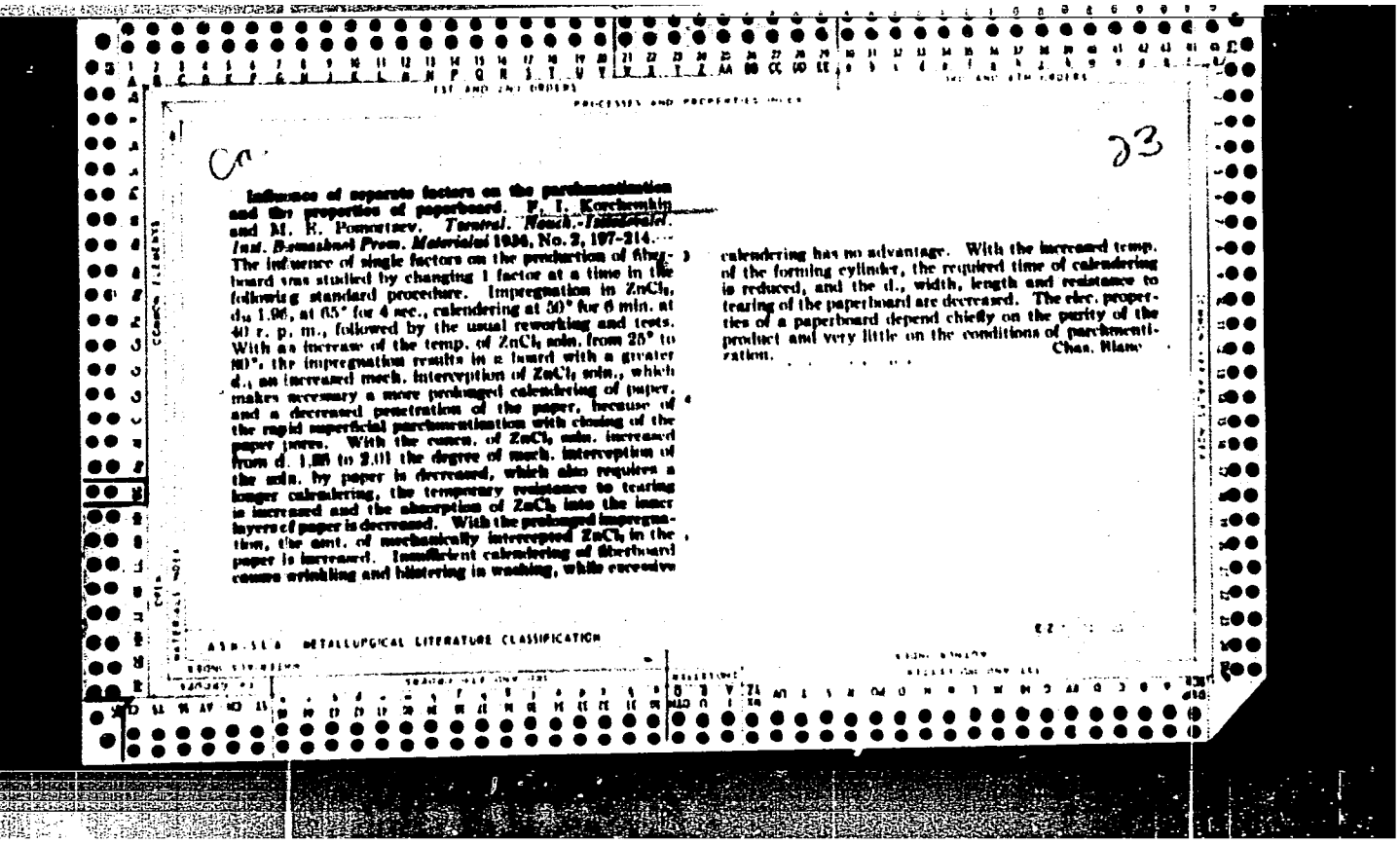


Purification of zinc chloride solutions from iron in the production of (parchmentised) fiberboard. F. I. Korchkin. *Materialui Vsesoyus. Nauch.-Issledovatel. Inst. Prirodn. Tselyulos. Prom.* (*Trans. All-Union Sci. Research Inst. Paper Cellulose Ind.*) 1932, No. 4, 149–55.—ZnCl$_2$ solns. (40°Be.) were freed from contaminating Fe as FeCl$_2$OH by the action of air (O$_2$, H$_2$O$_2$ and Cl$_2$. The chlorination method is more rapid than that with air (O$_2$) and cheaper than that with H$_2$O$_2$. For the neutralization of HCl formed in the process with Cl$_2$ Zn(OH)$_2$ or zinc dross free from Fe was used. The corrosive action of purified ZnCl$_2$ solns. on Cu vessels is greater than that of the crude solns., and can be reduced by a short contact with Zn.

Chas. Blanc



Production of (parchmentized) fiber paper from wood pulp. F. I. Korchemkin and E. D. Nikiforova. *Tsellyul. Bumazhnoi Prom. Materialui ral. Nauch.-Issledovatel. Inst. Paper Ind. Trans.*) 1933, (*Central Sci. Research Inst. Paper Ind. Trans.*) No. 3, 134-9.—A good grade of paper was obtained by substitution of 50, 75 and 100% bleached sulfite and sulfate pulp for rag waste. To obtain uniform penetration, the paper must be treated with $ZnCl_2$ solns. of lower concn. and at lower temp. Chas. Blanc



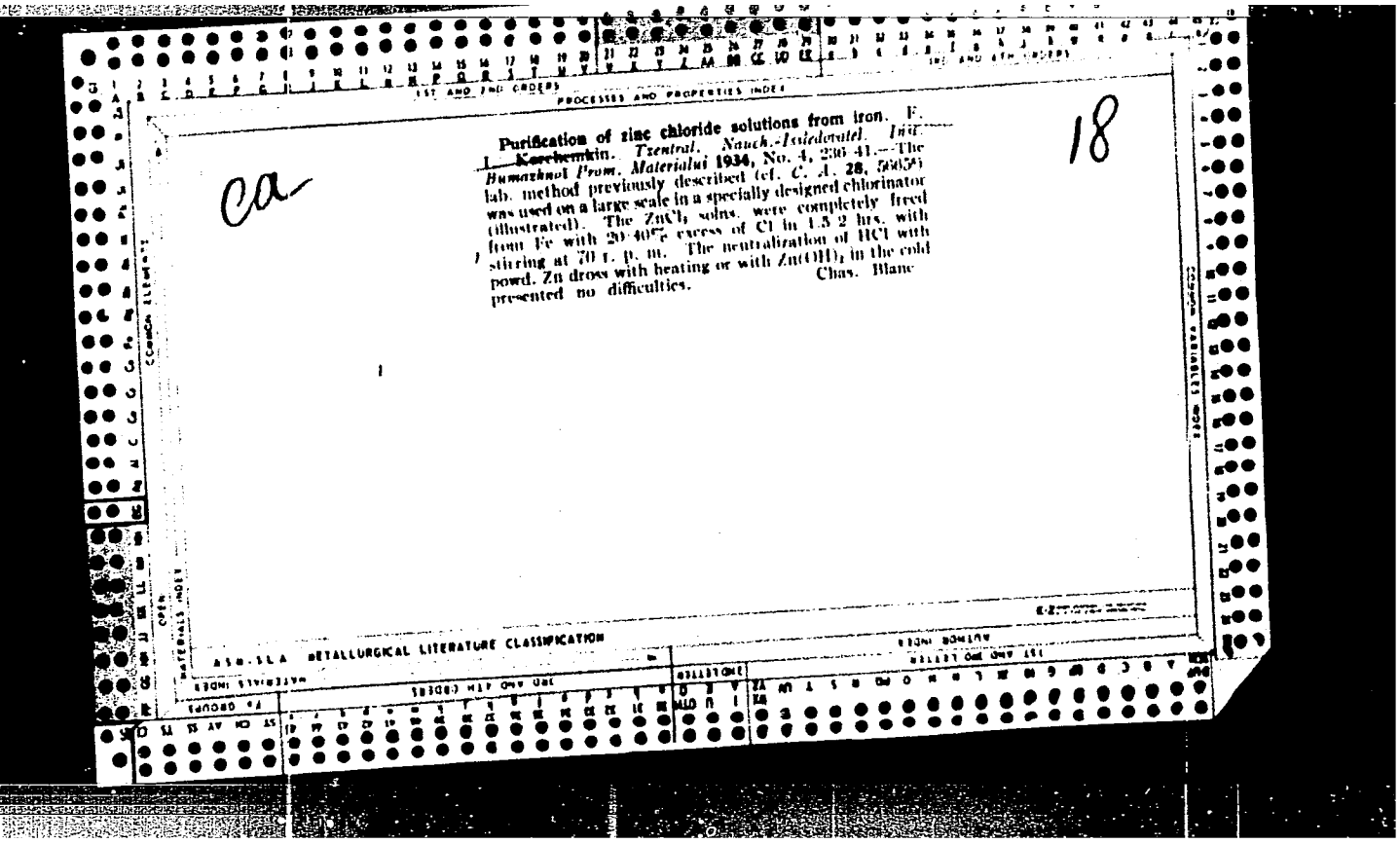
C

23

Influence of separate factors on the parchmentization and the properties of paperboard. P. I. Korchemkin and M. K. Pomortsev. *Tsentral. Nauch.-Issledovatel. Inst. Bumazhnoi Prom. Materialai* 1936, No. 2, 197-214.—The influence of single factors on the production of fiberboard was studied by changing 1 factor at a time in the following standard procedure. Impregnation in $ZnCl_2$, d_{20} 1.96, at 65° for 4 sec., calendering at 30° for 6 min. at 40 r. p. m., followed by the usual reworking and tests. With an increase of the temp. of $ZnCl_2$ soln. from 25° to 80°, the impregnation results in a board with a greater d_{20}, an increased mech. interception of $ZnCl_2$ soln., which makes necessary a more prolonged calendering of paper, and a decreased penetration of the paper, because of the rapid superficial parchmentization with closing of the paper pores. With the concn. of $ZnCl_2$ soln. increased from d. 1.88 to 2.01 the degree of mech. interception of the soln. by paper is decreased, which also requires a longer calendering, the temporary resistance to tearing is increased and the absorption of $ZnCl_2$ into the inner layers of paper is decreased. With the prolonged impregnation, the amt. of mechanically intercepted $ZnCl_2$ in the paper is increased. Insufficient calendering of fiberboard causes wrinkling and blistering in washing, while excessive calendering has no advantage. With the increased temp. of the forming cylinder, the required time of calendering is reduced, and the d., width, length and resistance to tearing of the paperboard are decreased. The elec. properties of a paperboard depend chiefly on the purity of the product and very little on the conditions of parchmentization.

Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



ca

18

Purification of zinc chloride solutions from iron. F. Korchemkin. *Tsentral. Nauch.-Issledovatel. Inst. Bumazhnoi Prom. Materialui* **1934**, No. 4, 236-41.—The lab. method previously described (cf. *C. A.* **28**, 5955) was used on a large scale in a specially designed chlorinator (illustrated). The $ZnCl_2$ solns. were completely freed from Fe with 20-40% excess of Cl in 1.5-2 hrs. with stirring at 70° i. p. m. The neutralization of HCl with powd. Zn dross with heating or with $Zn(OH)_2$ in the cold presented no difficulties.

Chas. Blanc

CA

PROCESSES AND PROPERTIES INDEX

23

Cellulose phthalates. N. I. Nikitin and E. I. Korchemkin. *Bull. acad. sci. U. R. S. S., Classe sci. chim.* 1940, 245-56(in German, 257); cf. *C. A.* **35**, 3436[9].—Since the formation of cellulose (I) phthalates from phthalic acid anhydride (II) and untreated I in pyridine (III) proceeds very slowly and requires prolonged heating which leads to considerable decompn. of the esters formed, various methods have been used in the pretreatment of I before esterification, to increase its activity. Most gratifying results are obtained when I is activated by swelling in water followed by removal of the solvent by means of III without intermediate drying. Esters are also easily formed when hydrated I obtained by mercerization and I pptd. from Schweizer's reagent are used. The phthalates which are sol. in III decomp. at 100-105° with the formation of II. The Cu salt of I phthalate is obtained by adding a small excess of $CuSO_4$ soln. to the Na salt of the ester in aq. acetone. It is dried at 100-5° since it is stable at that temp. Sapon. and titration of the CO_2H group in the phthalate and detn. of Cu in the salt give results which are in good agreement as regards the rate of esterification, it being about 1.2–2.0 of the HO groups based on $C_6H_{10}O_5$. The effect of the ratio II : I, temp. and duration of the reaction upon phthalization has been studied. A decrease in the temp. to 70-5° (instead of 105°), as well as a change in the above ratio from 20 : 1 to 5 : 1, causes a decrease of the reaction rate. When the duration of the reaction is increased from 4 to 8 hrs., the rate of esterification is somewhat increased. A 4-5% soln. of phthalate (esterification rate 1.40) in alc. + acetone (2 : 1) or alc. and benzene (1 : 1) after centrifuging gives a transparent film which, however, is rather easily torn. The reasons for the soly. of the phthalates obtained by means of II in III and the insoly. of esters obtained by esterifying I with phthalyl dichloride are discussed; it is assumed that the mol. structure is responsible for the different behavior. The above method used for the prepn. of I phthalates has been successfully employed also in the prepn. of other phthalates such as those of starch. Gertrude Berend

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

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23

The role of preliminary swelling of cellulose in the preparation of its phthalic esters. N. I. Nikitin and E. I. Kuchemukhin. *J. Applied Chem.* (U.S.S.R.) 13, 711 (in French, 760)(1940). A preliminary mercerization of cellulose with NaOH and consecutive washing with H_2O and then with pyridine accelerated the esterification process. Thus, the esterification with phthalic anhydride (I) was complete in 4-5 hrs. at 105-10° yielding a product having 1.6-2 hydroxyl groups substituted with phthalate radical (based on $C_6H_{10}O_5$). The esterification of cellulose pptd. from Schweitzer soln. proceeded still more rapidly. The acidic cellulose phthalates were not stable at 100-10° and gradually formed I, but their Cu salts were stable at that temp. The insoly. of esters obtained with phthalyl chloride is explained by the formation of 3-dimensional mols. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

The preparation and properties of phthalic esters of cellulose. I. I. Korchemkin. [illegible] 1040, [illegible] 18 27 [illegible] by the linters cellulose (I) 96.54 and lignin [illegible] and phthalic anhydride [illegible] method [illegible] and phthalic (II) in pyridine (III) form I acid esters (IV) which produce sol. salt like compds. with I. To obtain IV in the free state the reaction mass was dild. with H_2O, a little III added and the mixt. added with stirring to about 3% HCl at 15-20°; the IV sepd. in the form of flakes which were purified by pptg. with ether from an acetone soln. Owing to prolonged heating the esters were decompd. to a considerable degree and colored gray or even brown. To accelerate the esterification substituted air-dry formylcellulose (V) (contg. 2% of formyl and prepd. from 85% formic acid and I for 64 hrs. at room temp.) was used. The reaction of 1 part of V, 25 parts of II and 20 parts of III was more rapid, and 31.5 hrs. at 100.5° was sufficient to produce a product completely sol. in III. The formyl groups were split off during the reaction. The phthalic ester contained 60.35% of phthalic acid (VI) residue, which corresponds to a 1.50-1.75 degree of substitution. Analyses of the Cu product showed that the degree of substitution, the percentage of the remaining I, the percentage of VI, the percentage of COOH and the percentage of Cu in the Cu salt in various expts. were, resp.: 1.0, 51.93, 18.07, 11.51 and 9.32; 1.25, 46.32, 53.68, 10.21 and [illegible]; 1.75, 38.06, [illegible] 1.50, 41.80, 58.20, 17.58 and 11.08;

61.94, 18.70 and [illegible]; 2.00, 34.93, 65.07, 19.65 and 12.21. In another expt. the 3.00, 26.24, 73.76, 22.28 and 13.65. [illegible] room temp. pressed linters were kept in H_2O for 24 hrs. [illegible] Thus I was phthal and dehydrated with III (4 changes). [illegible] after 11.5 hrs. ated as before and dissolved completely [illegible] phthalated of heating; this shows that I swelled in H_2O is phthalated much faster. Analyses of 0.2037- and 0.2044-g. samples purified as above gave the following results: amt. of 0.1 N NaOH used 15.7 and 15.3 ml.; remaining VI [illegible] and 0.1110 g. (57.30 and 55.77%); regenerated cellulose 0.0870 and 0.1000 g.; remaining I 0.0871 and 0.0882 g. (12.96 and 13.15%); sum of the remaining VI and I 100.35 and 98.92%. A more rapid phthalation was obtained with mercerized cellulose. Linter was added to 22% NaOH for 24 hrs. at room temp., washed from base and added to 1% AcOH. The linter was then washed from acid, pressed and dehydrated with III (changed several times). Phthalation, carried out as previously, was completed after 7 hrs. heating. Analyses of 0.2152 and 0.[illegible] g. ester samples gave the following results: amt. of 1 N NaOH used 18.4 and 16.4 ml.; remaining VI 0.1371 and 0.122 g.; residue [illegible] and 62.35%. The degree of substitution was 1.75-2.00. Phthalation of I hydrate pptd. from Schweizer reagent proceeded easier and more uniformly than did that of mercerized I. After 3.5 hrs. of heating a product was formed which was completely sol. in III. The degree of substitution of the ester was 1.0-1.25. Further heating in III is necessary to increase

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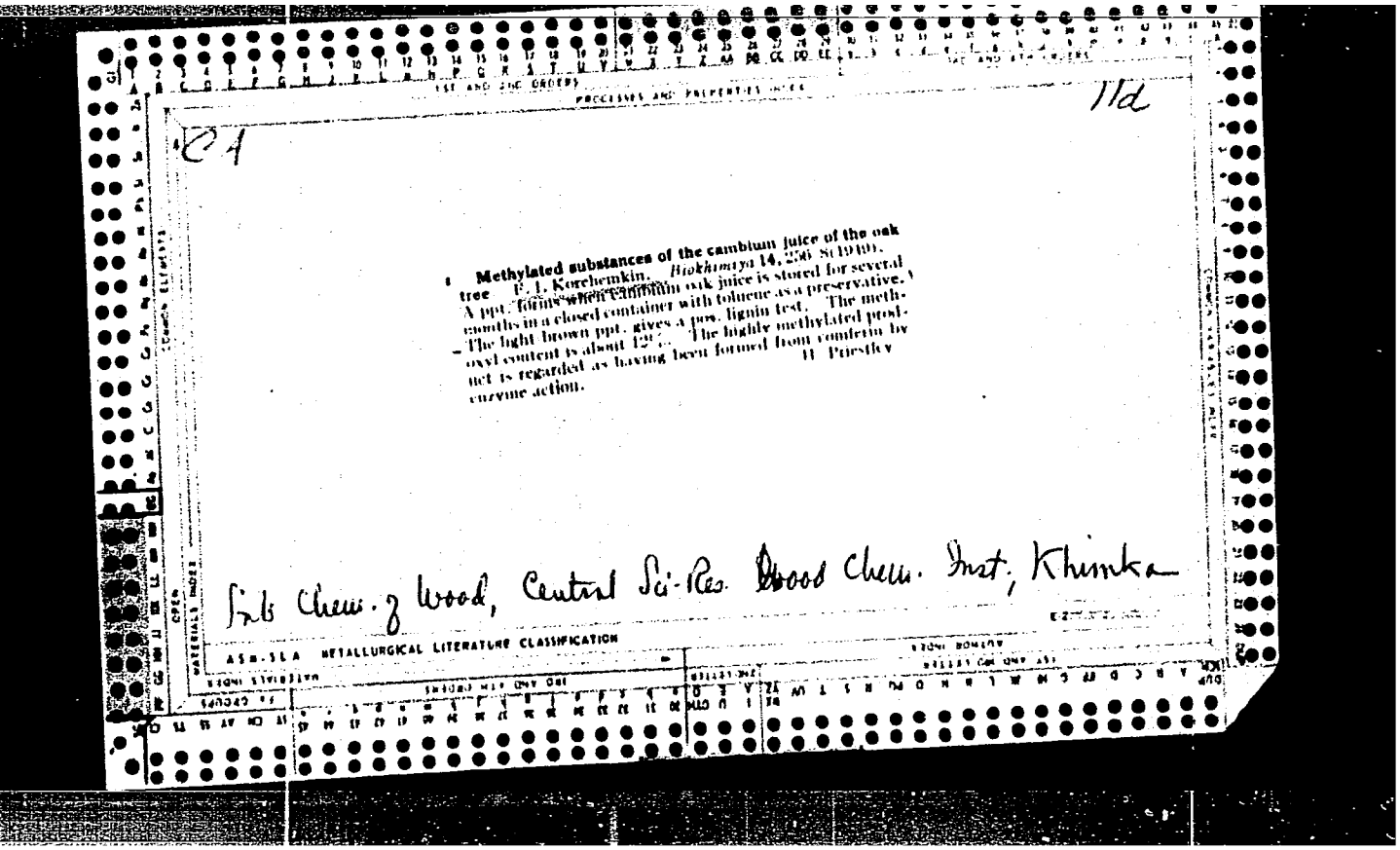
A 5 0 - S L A METALLURGICAL LITERATURE CLASSIFICATION



C1

11d

Methylated substances of the cambium juice of the oak tree P. I. Korchemkin. *Biokhimiya* 14, 256–8(1949). A ppt. forms when cambium oak juice is stored for several months in a closed container with toluene as a preservative. The light brown ppt. gives a pos. lignin test. The methoxyl content is about 12%. The highly methylated product is regarded as having been formed from coniferin by enzyme action. H Priestley

Lib Chem. & Wood, Central Sci-Res. Wood Chem. Inst, Khimka

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

FEFILOV, V.V.; KORCHEMKIN, F.I.

Leonid Petrovich Zherebov; on his 90th birthday. Der.i lesokhim.prom. 2no.6:22 Je '53. (MLRA 6:5)

(Zherebov, Leonid Petrovich, 1863-)

KORCHEMKIN, F.I.; ZHEREBOV, L.P.; EVSTIGNEYEV, V.B.

The nature of some substances of the cambial juice of Pinus silvestris.
Doklady Akad. Nauk S.S.S.R. 90, 429-31 '53. (MLRA 6:5)
(CA 47 no.17:8839 '53)
1. A.N. Bakh Biochem. Inst., Moscow.

KORCHEMKIN, F. I.

AID P - 924

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 15/22

Authors : Korchemkin, F. I. and Krysinskiy, B. V.

Title : Oxidation with atmospheric oxygen of black liquors obtained in the preparation of cellulose by the sulfate method

Periodical : Zhur. prikl. khim., 27, no. 5, 557-560, 1954

Abstract : Formic and acetic acids were obtained in the oxidation of black liquor with atmospheric oxygen at high temperatures and pressures. One table, 8 references (5 Russian: 1940-1951).

Institution : Central Scientific Research Institute of Wood Chemistry

Submitted : Jl 27, 1953

Korchemkin, F.I.

Alkylated nonaromatic substances in the cambial sap of plants. F. I. Korchemkin, L. P. Zherebov, and V. B. Bystrigeev. *J. Appl. Chem. U.S.S.R.* 27, 1153-6(1954)MD (Engl. translation).—See *C.A.* 49, 5393a. B. M. R.

USSR

Methylated nonaromatic substances in the cambial sap of pines. F. I. Korchemkin, L. P. Zheterov, and V. B. Evstigneev. Zhur. Priklad. Khim. 27, 1217-21(1954); cf. C.A. 47, 8809c.—Absorption spectra in the ultraviolet range, 400-210 mμ, of solns. of cambial sap of pines collected in 1949, 1950, and 1952 from June to late August were similar to that of solns. of coniferin sepd. from the cambial sap. The sap was purified until colorless before the measurements, and the coniferin was recrystd. several times and dried *in vacuo* over P_2O_5. Filtration of the sap through activated wood charcoal removed all of the aromatic substances. The filtrates had flat absorption curves rising slightly from the zero axis at higher wave lengths. These facts led to the conclusion that besides coniferin there are no aromatic substances in the sap and that methylated substances are present in considerable quantities. This is an important factor in the development of the theory of lignin formation. I. Bencowitz

Central Sci. Res. Wood-Chem. Inst. and Inst. Biochem. im. A. N. Bakh, AS USSR

AID P - 3731

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 11/16

Authors : Korchemkin, F. I. and L. P. Zherebov

Title : The reactivity of viscose celluloses

Periodical : Zhur. prikl. khim. 28, 8, 872-876, 1955

Abstract : The behavior of cellulose fibers in Schweitzer's reagent was studied and the changes are shown in sketches. The weakening or destruction of the outer walls of cellulose fibers seems to be an important factor in the determination of the reactivity of cellulose. One table, one photo, 18 references, 12 Russian (1938-1954).

Institution : Central Wood-chemical Scientific Research Institute

Submitted : Je 4, 1954

USSR.

The effect of dilute mineral acid on pulp fibers. F. I. Korchemkin and L. P. Zherebov. *Bumazh. Prom.* [illegible].—The effect of dil. HCl on the behavior of various sulfite and sulfate pulps in cuprammonium soln. (I) was studied. Approx. 1 g. pulp in 50 cc. 0.033*N* HCl was refluxed 0.5–2 hrs., filtered, washed, air-dried, and treated with I (6.7 g. Cu and 201 g. NH_4OH/l). Unbleached sulfite fibers (II) (44° Björkman) showed marked ballooning before and no ballooning after acid treatment; II (92° Björkman) showed slight ballooning after acid treatment; the same results were obtained on low and high $KMnO_4$ no. kraft pulps (102 and 140° Björkman, resp.).

J. L. Keays

Wood-Chem.

Central Sci-Res [illegible] Inst

KORCHEMKIN, F.I.

Effect of aqueous prehydrolysis of pine lignin on cellulose fibers obtained from it in the sulfate process. Zhur.prikl. khim. 29 no.9:1440-1442 S '56. (MLRA 9:11)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.

(Lignin) (Cellulose)

KORCHEMKIN, F.I.

Drying of rosin varnish coatings. Gidroliz. i lesokhim. prom. 10 no.3:13-14 '57. (MLRA 10:5)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Varnish and varnishing--Drying)

KORCHEMKIN, F.I.

Dyeability of woodpulp and the structure of the external layers of its fibers. Sbor.trud. TSNIILKHI no.12:184-188 '57. (MIRA 13:10)
(Dyes and dyeing--Cellulose)

KORCHEMKIN, F.I.

Producing resinate lacquer. Gidroliz. i lesokhim. prom. 11 no.1:13-14 '58. (MIRA 11:2)

1.TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Lacquer and lacquering) (Gums and resins)

KORCHEMKIN, F. I.

Characteristics of woodpulp as determined from its swelling in Schweitzer's reagent of different concentrations. Sbor.trud TSNIILKHI no.13:179-182 '59. (MIRA 13:10)
(Woodpulp)

KORCHEMKIN, F.I.

Preparation of mercerized cellulose of different swelling capacities. Zhur. prikl. khim. 33 no.6:1423-1425 Je '60. (MIRA 13:8)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Cellulose)

KORCHEMKIN, F.I.

Action of basic solutions of sodium hypochlorite on cellulose fibers.
Bum.prom. 36 no.2:19 F '61. (MIRA 14:2)
(Sodium hypochlorite) (Cellulose)

KORCHEMKIN, F. I.; Prinimala uchastiye: LARINA, A. V.

Effect of the degree of woodpulp grinding and of the various processes on the quality of the parchment. Trudy VNIIB no.47: 86-94 '61. (MIRA 16:1)

(Parchment) (Woodpulp)

KORCHEMKIN, F.I.; MALINSKIY, Yu.M.; SUKHOV, G.V.

Effect of ionizing radiations on the fibers of wood cellulose.
Trudy LTA no.91:101-104 '60. (MIRA 15:12)

1. TSentral'noy nauchno-issledovatel'skiy lesokhimicheskiy institut i Fiziko-khimicheskiy institut imeni Karpova.
(Cellulose)
(Materials, Effect of radiation on)

KORCHEMKIN, F.I.

Effect of the solutions of the oxidising agent (sodium hypochlorite) on cellulose fibers. Sbor.trud.TSNILKHI no.14: 116-119 '61. (MIRA 16:4)
(Cellulose) (Sodium hypochlorite) (Oxidation)

KORCHEMKIN, F.I.; VITOVTOVA, M.I.

Film formation during the conversion of the paper stock to parchment. Bum.prom. 38 no.1:17-18 Ja '63. (MIRA 16:2)

1. Moskovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta tsellyulozno-bumazhnoy promyshlennosti.
(Paper)

BOBROV, A.I.; KORCHEMKIN, F.I.

Chemically modified pulp. Bum. prom. [38] no.6:24-25 Je '63.
(MIRA 16:7)

1. Moskovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta tsellyulozno-bumazhnoy promyshlennosti.
(Woodpulp industry—Research)

L 31167-66 EWT(d)/EWT(l) IJP(c) WW/GG
ACC NR: AP6006819 SOURCE CODE: UR/0181/66/008/002/0387/0396

AUTHOR: Kessel', A. R.; Korchemkin, M. A. 36 B

ORG: Kazan Physicotechnical Institute (Kazanskiy fiziko-tekhnicheskiy institut)

TITLE: Theory of transients in nuclear quadrupole resonance 21, 44, 55

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 387-396

TOPIC TAGS: nuclear quadrupole resonance, spin system, nuclear resonance, multiple order

ABSTRACT: Equations have recently been derived for extending the phenomenological Bloch equations to spin systems with arbitrary spectra for the case of quadrupole and higher multipole interactions. These equations may also be applied to solid paramagnetics. The authors test these new equations on a specific spin system chosen in such a way that it has all the limitations which prevent the use of the phenomenological Bloch equations. Transient processes are studied in quadrupole resonance of nuclei in solids with regard to spin-spin and quadrupole interactions. No limitations are imposed on the symmetry of the crystal field nor on the direction

Card 1/2 2

of the external alternating field with respect to the crystal axes. Kinetic equations are derived for calculating the signals of free precession and spin echo for quadrupole resonance of nuclei with a spin of 3/2 in solid specimens. Localized magnetic and electric fields, the diagonal component of nuclear magnetic dipole interactions in the energy representation, and spin-lattice relaxation are taken into account in the relaxation parameters. It is shown that all interactions contribute to attenuation of the signal for free precession and that the rate of attenuation differs for the various components of magnetization. When the parameter for asymmetry of the crystal field differs from zero there is an additional echo at times $t = 3\tau/2$ and $t = 3\tau$ due to localized magnetic fields (where τ is the interval between pulses). The parameter for asymmetry of the crystal field may be calculated from the ratio of the amplitudes for the primary and secondary echoes which is especially important for spins of 3/2 in powders. Orig. art. has: 21 formulas.

SUB CODE: 20/ SUBM DATE: 05Jul65/ ORIG REF: 003/ OTH REF: 010

ARASLANOV, M.A.; GABITOV, G.S.; MILYUKOVSKIY, G.Ye.; RAYTMAN, Ye.A.; KOROHEMKIN, N.I.; KHAVKIN, F.A.; PEREVALOV, L.N.; KHROMUSHKIN, M.K.

Improvement of artificial sole leather drying techniques and decreased dispensing of fiber in artificial leather for shoe counters. Prom.energ. 18 no.2:9 F '63. (MIRA 16:2)
(Leather, Artificial--Drying)

L 03781-67 EWT(m) (D

ACC NR: AT6029629 SOURCE CODE: UR/0000/66/000/000/0150/0157

AUTHOR: Volokhova, N. A.; Gubin, V. A.; Darenskaya, N. G.; Kosnova, L. B.; Korchenkin, V. I.; Nevskaya, G. P.; Sedov, V. V.

ORG: none

TITLE: Peculiarities of clinical manifestations of radiation sickness in rhesus monkeys during gamma-ray irradiation

SOURCE: Voprosy obshchey radiobiologii (Problems of general radiobiology). Moscow, Atomizdat, 1966, 150-157

TOPIC TAGS: ~~[illegible]~~ radiation biologic effect, monkey, dog, ionizing radiation, ~~hematological effect~~ hematology

ABSTRACT: A comprehensive clinical examination of gamma-irradiated monkeys was conducted, and the data were compared with results of similar examinations of dogs. Seventeen monkeys (Macaca rhesus) of both sexes, weighing 2.0 to 4.0 kg, were subjected to gamma irradiation from an EGO-2 apparatus with a dose rate of 357—313 r/min. Prior to irradiation, all monkeys had been under clinical observation for 2—3 weeks. Eleven of the 14 monkeys irradiated with 300 r died (average duration of life 16.5 days), while two of the 3 monkeys irradiated with 350 r died (29.5 and 36.2 days after irradiation). Both groups of gamma-

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L 03781-67

ACC NR: AT6029629 O

irradiated monkeys were considered together, since the clinical manifestations of radiation sickness were similar in both groups. Experimental data were compared with data from analogous dog experiments, using a 300-r dose of gamma rays, and no essential differences in the radiation effect were noted between the two species. However, the spread of life durations in monkeys (6.5—36.2 days) was wider than for dogs (11.5—18.5 days). The primary reaction to radiation was more pronounced and developed more rapidly in monkeys than in dogs. The primary radiation reaction was absent in 2 out of 17 monkeys, as compared with 18 out of 28 dogs. Furthermore, seven monkeys experienced severe primary radiation reactions, while none of the dogs did. In the first 10—11 days after irradiation, no essential differences were noted between the temperature reactions of monkeys and dogs. However, by the time of death dogs had elevated body temperatures (average 1.5C above normal), whereas monkeys' temperatures had fallen considerably below normal. Symptoms of radiation sickness appeared later (15—18 days after irradiation) and developed more gradually in monkeys than in dogs (7—12 days). Autonomic dysfunction is considered responsible for the lability of symptoms in monkeys in the early postradiation period. This hypothesis is substantiated by the considerable variations in blood pressure, the unstable heart rhythm, etc. Hematopoietic changes in monkeys in response to radiation had a phase character, demonstrating the different course of the radiation reaction in different

Card 2/3

L 03781-67

ACC NR: AT6029629 O

types of cells. Since blood regeneration occurred even in monkeys dying after 30—36 days, it was concluded that blood changes were not the primary factor in animal deaths. The lower lethal dose values encountered in these experiments are partially explained by differing experimental conditions, but require further study. Orig. art. has: 2 figures and 1 table. [JS]

SUB CODE: 06/ SUBM DATE: 23Apr66/ ORIG REF: 008/ OTH REF: 006
ATD PRESS: 5064

Card 3/3

KORCHEMKIN, V.I.; RAYEVA, N.V.

Electrocardiographic analysis of the reactivity of the heart to adrenaline in dogs after acute radiation sickness caused by total X-ray irradiation. Radiobiologiia 2 no.6:883-890 '62. (MIRA 16:11)

KORCHEMKIN, V.I.

Reactivity of the cardiovascular system during the administration of small concentrations of Sr90. Med. rad. 5 no.9:22-26 S '60. (MIRA 13:12)

(CARDIOVASCULAR SYSTEM) (STRONTIUM—ISOTOPES)

43486

S/205/62/002/006/014/021
E027/E410

27.2400

AUTHORS: Korchemkin, V.I., Rayeva, N.V.

TITLE: Electrocardiographic analysis of the reactivity of the heart to adrenaline in dogs recovered from acute radiation sickness due to general X-irradiation

PERIODICAL: Radiobiologiya, v.2., no.6, 1962, 883-890

TEXT: The electrocardiogram before and after the administration of adrenaline has been studied in 13 dogs which had survived 1 or 2 doses of X-irradiation (600 r) or gamma-irradiation (300 to 350 r) as a result of intensive post-irradiation treatment. Eleven received a single dose and were examined 2 to 4.5, 12 to 16, and 23 months after irradiation: five were irradiated twice and were examined 1.5 and 24 months after the second irradiation. The intervals between irradiations were 13 - 16 and 3 months respectively. After recording basic electrocardiographic data 1:40000 adrenaline was injected intravenously in a dose of 2.5 μg/kg over 10 seconds, and recording was continued for a further 5.8 minutes. Forty healthy dogs were examined as controls. All the irradiated dogs showed changes in their

Card 1/2

L 62814-65 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(c)
PF-4 JD/HW

ACCESSION NR: AP5019051 UR/0286/65/000/012/0080/0080
531.717

AUTHOR: Biryukov, B. N.; Korchemkin, V. M. 40 B

TITLE: A method for checking the thickness of a coating. Class 42, No. 172057

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 80

TOPIC TAGS: thickness gage, measuring instrument

ABSTRACT: This Author's Certificate introduces a method for checking the thickness of a coating by measuring luminous flux. The method is designed for evaluating the thickness of a coating on materials which have a lattice structure. A photocalorimeter is used for measuring the intensity of the luminous flux passing through an aperture in the material before and after application of the coating; and the value to be measured is determined from a graph.

ASSOCIATION: none

SUBMITTED: 02Dec63 ENCL: 00 SUB CODE: OP

Card 1/2

Card 2/2

Korchemkin, Yu. I.

USSR

Determination of orientation of a monocrystal in case of a nonsymmetric Laue diagram. Yu. I. Korchemkin. *Uchenye Zapiski Moskov Univ.* 8, No. 1, 80-8(1953); *Referat. Zhur., Khim.* 1954, No. 35576.—Use of an auxiliary diagram that combines a grid of zonal curves and stereographic projections of corresponding zone axes gives graphically a stereographic projection of a crystal that is otherwise hard to decipher because of poorly defined faces and a nonsymmetric Laue diagram.

M. Hoseh

RDW

MEL'NIKOV, L.M.; MEDVEDEVA, G.A.; OLERSKAYA, S.M.; KORCHEMKINA, A.S.; BUTAKOV, D.K.; UKSUSNIKOVA, A.A.

Determining the composition of sulfides in steels alloyed with nickel and manganese. Zav. lab. 31 no.2:142-146 '65. (MIRA 18:7)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.

MONAYENKOV, A.M.; KORCHEMKINA, I.Ye.; MIKHAYLOVA, G.M.; DOMRACHEVA, Z.V.

Physiological analysis of the individual immunological macitivy of horses used in the production of therapeutic and immune serums. Zhur. mikrobiol.epid.i immun. 30 no.10:60-67 O '59. (MIRA 13:2)

1. Iz Instituta normal'noy i patologicheskoy fiziologii AMN SSSR i Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.
(IMMUNE SERUMS)
(HORSES)

BERLIN, L.B. [deceased], TARNOPOL'SKAYA, P.D., ALIYEVA, V.I., BEYUL, Ye.A. YEKISHENINA, N.I., KORCHEMKINA, K.M., PARAMONOVA, E.G. (Moskva).

Effect of diets with different protein content on the course of hypertension [with summary in English]. Vop.pit. 17 no.5:19-26 S-O '58 (MIRA 11:10)

1. Iz kliniki lechebnogo pitaniya (zav. prof. F.K. Men'shikov) Instituta pitaniya AMN SSSR, Moskva.
(HYPERTENSION, ther.
diet, eff. of protein content (Rus))
(PROTEINS,
dietary, eff. of protein content on hypertension (Rus))
(DIET, in various dis.
hypertension, eff. of protein content (Rus))

KORCHEMKINA, K.M.

Motor function of the intestine in patients following total resection of the stomach. Vop.pit. 18 no.5:17-20 S-O '59. (MIRA 13:1)

1. Iz rentgenodiagnosticheskogo otdeleniya (zav. - doktor med.nauk P.D. Tarnopol'skaya) Kliniki lechebnogo pitaniya Instituta pitaniya AMN SSSR, Moskva.
(INTESTINE physiol.)
(GASTRECTOMY)

KORCHEMKINA, K.M.

Change in the motor and evacuatory function of the stomach in patients with peptic ulcer of the stomach and duodenum under the influence of a diet rich in qualitatively different fats. Vop. pit. 20 no.6:71-72 N-D '61. (MIRA 15:6)

1. Iz kliniki lechebnogo pitaniya (zaveduyushchiy - doktor med.nauk L.M. Levitskiy) Instituta pitaniya AMN SSSR, Moskva.
(PEPTIC ULCER) (DIET IN DISEASE)
(OLIVE OIL--PHYSIOLOGICAL EFFECT)

PUDOVIK, A.N.; KORCHEMKINA, M.V.

New synthesis of esters of phosphonic and thiophosphonic acids. XIV. New method of synthesis of esters of amino phosphonic acids. Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk '52, 940-6. (MLRA 5:11)
(CA 47 no.20:10468 '53)

1. PUDOVIK, A. N., KORCHEMKINA, M. V.

2. USSR (600)

4. Phosphonic Acid

7. New method for the synthesis of phosphonic and thiophosphonic esters. Part 14. New method for the synthesis of aminophosphonic esters. Izv. AN SSSR. Otd. khim. nauk, No. 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Organic Chemistry

(4) Chem

Synthesis of esters of phosphonic and thiophosphonic acids. XII. Addition of dialkyl phosphites to unsaturated dibasic acids and esters. A. N. Pudovik. *Bull. acad. sci. U.S.S.R., Classe sci. chim.* 1952, 821-4 (Engl. translation). See *C.A.* 47, 10467*e*. XIII. Addition of diethyl thiophosphite to ketones and aldehydes. A. N. Pudovik and G. A. Zametaeva. *Ibid.* 825-30. See *C.A.* 47, 10467*i*. XIV. Method of synthesis of esters of amino phosphonic acids. A. N. Pudovik and M. V. Korchemkina. *Ibid.* 831-6. See *C.A.* 47, 10468*f*. XV. Addition of esters of phenyl- and alkylphosphonous acids to esters of methacrylic and acrylic acids. A. N. Pudovik and D. Kh. Yarmukhametova. *Ibid.* 803-6. See *C.A.* 47, 10469*c*.

H. L. H.

11-11-54
mld

TARNOPOL'SKAYA, P.D.; KORCHEMKINA, Ye.M.

Roentgenokymographic studies on functional disorders of the heart in hypertension during low-salt diet therapy. Zhur.ob. biol. 20 no.2:35-40 Mr-Ap '59. (MIRA 12:5)

1. Iz kliniki lechebnogo pitaniya (zav. - prof. F.K.Men'shikov) Instituta pitaniya AMN SSSR.
(DIETS, in var. dis.
low-salt, in hypertension, eff. on roentgenokymography (Rus))
(HYPERTENSION, ther.
low-salt diet, eff. on roentgenokymography (Rus))
(KYMOGRAPHY,
roentgenokymography in low-salt diet ther. of hypertension (Rus))

KORCHEMKIYA, F. I.

19953 KORCHEMKIYA, F. I. Metilirovanniye veshchestva kambia l' nogo soka sosny. Biokhimiya, 1949, Vyp. 3, s. 256-58.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

ACCESSION NR: AP4033682 S/0128/64/000/004/0010/0011

AUTHOR: Korchemkina, Z. A.

TITLE: An experiment in substituting heat resistant steel

SOURCE: Liteynoye proizvodstvo, no. 4, 1964, 10-11

TOPIC TAGS: steel, heat resistance, scale resistance, calorization, aluminum coating

ABSTRACT: Steels at some factories have been found to be insufficiently resistant to scaling in a smoky atmosphere. In attempting to solve the problem of finding scale-resistant steel, use has been made of laboratory work on replacing the present steel with calorized carbon steel, obtained by treating the steel surface with aluminum. In microstructure, this calorized steel is distinguished by an outer layer of alumina, formed through the oxidation of aluminum. The high bond between the aluminous coating and the metal base preserves the metal from further oxidation. The thickness of the layer depends on the length of treatment. Steel calorized by the diffusion method may be used for long periods at high temperatures (up to 950C). The liquid method of calorizing is more efficient, as it is quicker and the process is readily susceptible to mechanization. The steel is mounted on a frame and

Card 1/2

Card 2/2

KORCHEMNAYA, D. I.

18

PHASE I BOOK EXPLOITATION SOV/5777

Vinogradov, A. P., Academician, and D. I. Ryabchikov, Doctor of Chemical Sciences, Professor, Resp. Eds.

Metody opredeleniya i analiza redkikh elementov (Methods for the Detection and Analysis of Rare Elements) Moscow, Izd-vo AN SSSR, 1961. 667 p. Errata slip inserted. 6000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo.

Ed. of Publishing House: M. P. Volynets; Tech. Ed.: O. Gus'kova.

PURPOSE: This book is intended for analytical chemists and for students of analytical chemistry.

COVERAGE: The handbook was published in accordance with a decision of the Vsesoyuznoye soveshchaniye po analizu redkikh elementov (All-Union Conference on the Analysis of Rare Elements) called

Card 1/5

Methods for the Detection (Cont.)

together by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific and Technical Committee of the Council of Ministers of the USSR) and the Academy of Sciences USSR in December, 1959. The material is arranged in accordance with the group position of elements in the periodic system, and each section is prefaced by an article discussing the analytical methods most used in the Soviet and non-Soviet countries. Each section deals with the physical, physicochemical, and chemical methods for the analysis of raw materials, semi-products, and pure metals, and is accompanied by an extensive bibliography listing works published in the field in recent years. The following are mentioned for their help in preparing the book for publication: I. P. Alimarin, G. N. Bilimovich, A. I. Busev, E. Ye. Vaynshteyn, M. P. Volynets, V. G. Goryushina, A. M. Dymov, S. V. Yelinson, O. Ye. Zvyagintsev, G. M. Kolosova, Ye. K. Korchemnaya, V. I. Lebedev, G. A. Malofeyeva, B. N. Molent'yev, V. A. Nazarenko, I. I. Nazarenko, T. V. Petrova, N. S. Poluektov, A. I. Ponomarev, V. A. Ryabukhin, N. S. Stroganova, and Yu. A. Chernikhov.

Card 2/5

Methods for the Detection (Cont.)

S/062/60/000/009/015/021
B023/B064

AUTHORS: Belikov, V. M., Mayranovskiy, S. G., Korchemnaya, Ts. B., Novikov, S. S., and Klimova, V. A.

TITLE: Tautomerism of Nitro Compounds. Communication 1. Study of the Mechanism of Tautomeric Conversions of Phenyl Nitromethane

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 9, pp. 1675-1680

TEXT: The authors investigated the tautomeric conversions of the nitro compounds as thoroughly as possible by the polarographic method. They used phenyl nitromethane because its tautomeric conversions proceed comparatively slowly. They determined the constant (K_N) of the acidic dissociation of phenyl nitromethane in water both potentiometrically and polarographically, and obtained $K_N = 1.6 \cdot 10^{-7}$ mole/l. The dissociation kinetics of phenyl nitromethane was investigated in buffer solutions at pH between 7 and 10. The constants of the rate of dissociation were

Card 1/4

experimentally determined with all components of the buffer solution. The rate of interaction of phenyl nitromethane, with water as standard, is $k_{ND}^{H_2O} \approx 8 \cdot 10^{-7}$ 1/mole sec. The kinetics of the transition from the aci- into the nitro form was also studied at pH between 1 and 6. It is found that the rate of isomerization is independent of the hydrogen ion concentration at pH < 2, and may be expressed by the equation

$$C_6H_5CH = NOOH + H_2O \xrightarrow{k_{AD}^{H_2O}} C_6H_5CH = NOO^- + H_3O^+$$

The rate of isomerization increases at a further increase of pH. In general, the rate of isomerization is determined by the stage of dissociation of the aci form. The constants were - like in the determination of the dissociation rate of the nitro form - determined with all components of the buffer mixtures. The aci form is a stronger acid than the nitro form. The behavior of the phenyl nitromethane ion in buffer solutions at pH 4-6 showed that in the pH range of from 4 to 4.7, the rate of development of nitro forms is practically independent of the pH of the solution. At a

Card 2/4

Tautomerism of Nitro Compounds. Communication 1. Study of the Mechanism of Tautomeric Conversions of Phenyl Nitromethane

S/062/60/000/009/015/021
B023/B064

of other tautomeric compounds. G. S. Salyamon and Ya. S. Bobovich (Ref.12) are mentioned. V. I. Slovetskiy and V. A. Shlyapochniokov have taken the spectra. There are 1 table and 12 references: 3 Soviet, 6 US, 1 German, 1 Danish, and 1 Swedish.

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: March 24, 1959; completed June 8, 1960

$$C_6H_5CH_2NO_2 + H_2O \underset{k_{NR}^{H_3O^+}}{\overset{k_{ND}^{H_2O}}{\rightleftharpoons}} C_6H_5C^-HNO_2 \qquad K_N'$$

$$k_1 \uparrow\downarrow k_2 \qquad K$$

$$C_6H_5CH{=}NOOH + H_2O \underset{k_{AR}^{H_3O^+}}{\overset{k_{AD}^{H_2O}}{\rightleftharpoons}} C_6H_5CHNOO^-H_3O^+ \qquad K_A$$

$K_N' \approx 2 \cdot 10^{-7}$ M/л $k_{ND}^{H_2O} = 8 \cdot 10^{-7}$ л/М·сек $k_{NR}^{H_3O^+} = 200$ л/М·сек.

$K_A = 1{,}3 \cdot 10^{-4}$ M/л $k_{AD}^{H_2O} = 4{,}14 \cdot 10^{-6}$ л/М·сек $k_{AR}^{H_3O^+} = 18$ л/М·сек.

Card 4/4

84854

S/062/60/000/010/007/018
B015/B064

11.1360

AUTHORS: Mayranovskiy, S. G., Belikov, V. M., Korchemnaya, Ts. B., Klimova, V. A., and Novikov, S. S.

TITLE: Tautomerism of Nitro-compounds. Information 2. Polarographic Investigation of the Kinetics of Tautomeric Conversions of Phenyl Nitro-methane

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 10, pp. 1787-1795

TEXT: In a previous investigation (Ref. 1), the polarographic activity of the aci-form of phenyl nitro-methane was determined. The present paper describes the technique applied and gives the experimental data obtained. The polarographic behavior of the aci- and nitroforms of phenyl nitro-methane was investigated, i.e., the kinetics of the transformation of the aci-form into the nitro-form at pH 1-4, the nitro-form into the anion at pH 7-10, and the anion into the nitro-form at pH 4-6. Moreover, the dissociation constants of the aci- and nitro-forms were

Card 1/3

84854

Tautomerism of Nitro-compounds. Information 2. Polarographic Investigation of the Kinetics of Tautomeric Conversions of Phenyl Nitro-methane

S/062/60/000/010/007/018
B015/B064

polarographically and potentiometrically determined. The experiments were conducted in an optical polarograph, and the current was measured with an М-91 (M-91) microammeter. The potential of the dropping electrode was checked with an ЛМ-1 (LM-1) voltmeter, and determined with a П-4 (P-4) potentiometer. The experiments were carried out at 25±0.1°C using various buffer solutions, and the pH was determined with glass electrodes and ЛП-5 (LP-5) or ЛП-59 (LP-59) potentiometers. The potentials of the half-waves at pH 1..15 are $E_{1/2}$ = -0.52 v for the nitro-form and $E_{1/2}$ = -0.66 v for the aci-form. Investigations of the dissociation kinetics showed that the ionization of phenyl nitro-methane in buffer solutions can be described by an equation of the first order. The ionization rate was investigated in the presence of various bases. The rate of transformation of the aci-form into the nitro-form was found to follow the equation of a reaction of the first order throughout the pH range investigated. Investigations on the recombination kinetics of phenyl nitro-methane showed that at pH 4-5 the dissociation of the aci-form and the recombination of the nitro-form take place simultaneously. The values for the dissociation

Card 2/3

BELIKOV, V.M.; MAYRANOVSKIY, S.G.; KORCHEMNAYA, TS.B.; NOVIKOV, S.S.

Tautomerism of nitro compounds. Report 3: Effect of temperature and ionic strength of solutions on the rates of phenylnitomethane tautomeric transitions. Izv.AN SSSR,Otd.khim.nauk no.6:1108-1111 Je '61. (MIRA 14:6)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Methane) (Tautomerism)

BELIKOV, V.M.; MAYRANOVSKIY, S.G.; KORCHEMNAYA, TS.B.; NOVIKOV, S.S.

Tautomerism of nitro compounds. Report No.4: Mechanims of tautomeric transformations of nitro compounds. Izv.AN SSSR Otd.khim.nauk no.4:605-614 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo.
(Nitro compounds) (Tautomerism)

MAYRANOVSKIY, S.G.; BELIKOV, V.M.; KORCHEMNAYA, TS.B.; NOVIKOV, S.S.

Mechanism of reduction of nitro compounds on the dropping mercury electrode. Izv.AN SSSR.Otd.khim.nauk no.3:523-525 Mr '62. (MIRA 15:3)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Nitro compounds) (Reduction, Electrolytic)

BELIKOV, V.M.; MAYRANOVSKIY, S.G.; KORCHEMNAYA, TS.B.; NOVIKOV, S.S.

Kinetic polarographic currents of the recombination of anions of nitro compounds. Izv. AN SSSR. Otd.khim.nauk no.11:2103 N '62. (MIRA 15:12)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i Institut elementoorganicheskikh soyedineniya AN SSSR.
(Nitro compounds) (Polarography)

BELIKOV, V.M.; MAYRANOVSKIY, S.G.; KORCHEMNAYA, TS.B.; GUL'TYAY, V.P.

Tautomerism of nitro compounds. Report No.5: Polarographic study of recombination of nitroacetic ester anion. Izv. AN SSSR. Ser.khim. no.3:439-444 Mr '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR i Institut elementoorganicheskikh soyedineniy AN SSSR.

L 31346-65 EWT(m)/EPF(c)/EPR/EWP(j)/EWA(c) Pc-4/Pr-4/Ps-4 RPL WW/RM

ACCESSION NR: AP4045797 S/0062/64/000/009/1599/1605

28
26
B

AUTHOR: Belikov, V. M.; Korchemnaya, Ts. B.; Mayranovskiy, S. G.; Novikov, S. S.

TITLE: Tautomerism of nitro compounds. Communication 6: Use of the pH meter for investigating the kinetics of acid dissociation and recombination of 1-nitropropane

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 9, 1964, 1599-1605

TOPIC TAGS: nitropropane, tautomerism, acid dissociationkinetics, acid recombination kinetics, recombination rate constant, energy of activation, preexponential constant, entropy of activation, protolytic reaction

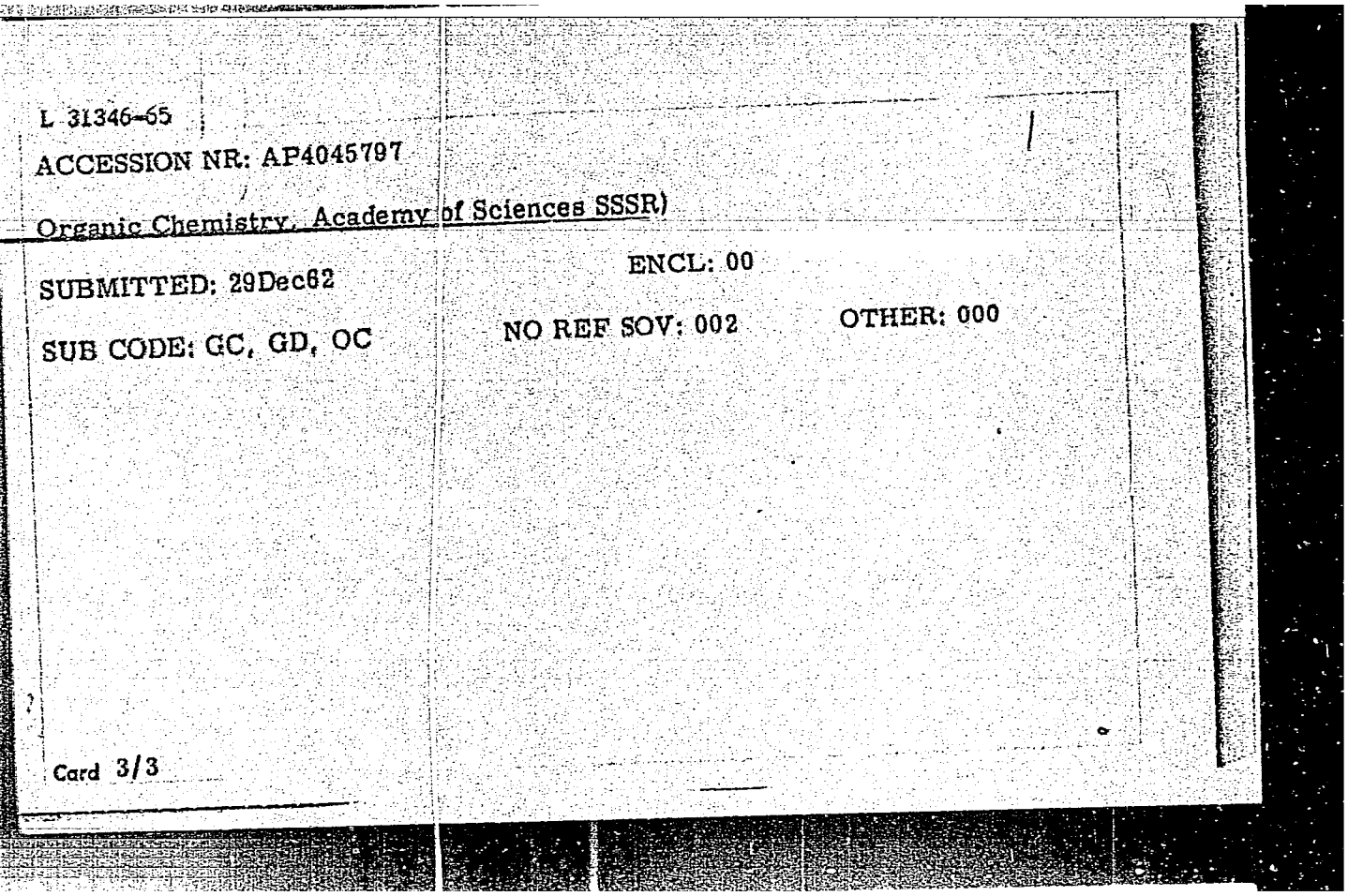
ABSTRACT: The rate of dissociation of 1-nitropropane by the action of a base (KOH) and the rate of recombination of the potassium salt of 1-nitropropane by the action of HCl was investigated. Studies of the rates of these protolytic reactions in the pH range from 5.5-10 were conducted using a pH-meter SBU-1a/SBR-2c with titrator TTT-1c ("Radiometer" Company). 1-nitropropane containing less than 0.5% of 2-nitropropane was used; contamination by the latter caused

Card 1/3

ACCESSION NR: AP4045797

significant change in the rate constant-pH relationship (e.g., slope of the pk_1-pH line was 0.64, compared to 0.94 for the purified 1-nitropropane). The recombination rate constant varied from 780 1/M.sec. at pH 7.5 to 490 1/M. sec. at pH 5.5. Using an average value of these constants, corresponding to the value of pH 6.1, the energies of activation, the preexponential constant and the entropies of activation were calculated for the dissociation and recombination of 1-nitropropane by the action of H_2O, OH^- and H_3O^+. To determine if the rate constant of the recombination of the 1-nitropropane anion was dependent on the concentration of weak acids, reactions were run at 15C in the presence of varying amounts of glycocoll. The rate constant at pH 7.7-8.2 remained constant, equaling 4×10^{-2} 1/M.sec. The results obtained in the present investigation complemented those obtained previously by the authors' polarographic studies in buffered solutions (Izv. AN SSSR. Otd. khim. n. 1962, 605). Orig. art. has: 3 figures, 2 tables, and 17 equations

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences SSSR) Institut organicheskiy khimii Akademii nauk SSSR im. N. D. Zelinskogo (Institute of



L 31346-65

ACCESSION NR: AP4045797

Organic Chemistry, Academy of Sciences SSSR)

SUBMITTED: 29Dec62 ENCL: 00

SUB CODE: GC, GD, OC NO REF SOV: 002 OTHER: 000

Card 3/3

ALIMARIN, I.P.; BILIMOVICH, G.N.; BUSEV, A.I.; VAYNSHTEYN, E.Ye.; VOLYNETS, M.P.; GORYUSHINA, V.G.; DYMOV, A.M.; YELINSON, S.V.; ZVYAGINTSEV, O.Ye.; KOLOSOVA, G.M.; KORCHEMNAYA, Ye.K.; LEBEDEV, V.I.; MALOFEYEVA, G.A.; MELENT'YEV, B.N.; NAZARENKO, V.A.; NAZARENKO, I.I.; PETROVA, T.V.; POLUEKTOV, N.S.; PONOMAREV, A.I.; RYABUKHIN, V.A.; STROGANOVA, N.S.; CHERNIKHOV, Yu.A.; VINOGRADOV, A.P., akademik, otv. red.; RYABCHIKOV, D.I., doktor khim. nauk, prof., otv. red.; GUS'KOVA, O., tekhn. red.

[Methods for the determination and analysis of rare elements] Metody opredeleniia i analiza redkikh elementov. Moskva, 1961. 667 p. (MIRA 14:7)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii.
(Metals, Rare and minor)

S/137/62/000/001/235/237
A154/A101

AUTHORS: Ryabchikov, D. I., Korchemnaya, Ye. K.

TITLE: The present state of the analytical chemistry of thorium

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 12, abstract 1K78 (V sb. "Metody opredeleniya i analiza redk. elementov". Moscow, AN SSSR, 1961, 374-399)

TEXT: This review describes methods for the following: Determination and separation from Fe, Al, Pb, Cr, Ca, Sr, Ba, Zn, Be, Ga, Mn, Nb and Ta, determination of Th in ores and alloys. Determination of admixtures in Th. Emanation methods for the determination of Th in minerals, rocks and soils. Determination of Th in monazite with phytic acid. Direct photometric determination in rocks with arsenazo III. Trilonometric and photometric methods of determination of Th in minerals and ores. Ion-exchange trilonometric determination of Th in monazite concentrates. Determination of admixtures in Th compounds by the vacuum evaporation method. Luminescent determination of small amounts of Ga, Sm, and Eu in Th. There are 286 references.

[Abstracter's note: Complete translation] B. Melent'yev

Card 1/1

23839

S/020/61/138/002/022/024
B103/B220

5.2100 1273, 1043, 1087

AUTHORS: Ryabchikov, D. I. and Korchemnaya, Ye. K.

TITLE: Monocitrate complexes of the rare earths

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 2, 1961, 397-398

TEXT: The first author studied the interaction between citrates of alkaline metals and salts of rare earths (Ref. 1: D. I. Ryabchikov, Ye. A. Terent'yeva, DAN, 58, 1373 (1947)) and continued this work. According to Ref. 1, the citrates are energetic complexing agents. Moreover, it has been proved (Ref. 2: D. I. Ryabchikov, Ye. A. Terent'yeva, Izv. AN SSSR, OKhN, 1949, no. 1, 44) that the coordination binding of the rare earths (RE) with the addenda is effected mainly by the atoms of oxygen or tertiary nitrogen. Rare earths show the coordination number 6. The authors proved, by means of several precipitating agents: $PO_4^{3-} > F^- > C_2O_4^{2-} > OH^- > [Fe(CN)_6]^{4-}$ that the power of complex formation of the RE with any addendum increases from lanthanum to lutetium with decreasing ionic radius. The stability of the complex compounds of rare

Card 1/4

23839

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S/020/61/138/002/022/024
B103/B220

Monocitrate complexes of the rare earths

earths is dependent on the pH of the medium and as a rule, decreases with increasing acidity. With a ratio Me : Cit = 1 : 2, a very stable complex compound is formed. Previously, the precipitate of the interaction products for a ratio Me : Cit = 1 : 1 was regarded as simple citrate and not further investigated. The authors proved that a complex compound is formed also in this case. The ion of the RE cannot be established by $K_4[Fe(CN)_6]$, the precipitate deposits only after acidification of the solution. In this case also, a general tendency is evident to increase the stability of the complex compounds of rare earths. Thus, the reaction of all rare earths proceeds negatively with $K_4[Fe(CN)_6]$. Lanthanum, neodymium, and gadolinium react with oxalate, whilst yttrium and erbium do not form precipitates any more. It is rather surprising than an addition of NaOH entails the decomposition of the complex, whereas alkali is one of the best precipitating agents of the RE. Notwithstanding the fact than an addition of 1 mole NaOH effects an increase of the pH up to 9, the stability of the complex compound increases considerably. The lanthanum ion is neither precipitated from an alkalized solution by $K_4[Fe(CN)_6]$, nor

Card 2/4

23839
S/020/61/138/002/022/024
B103/B220

Monocitrate complexes of the rare earths

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Soiences USSR)

PRESENTED: December 28, 1960, by A. P. Vinogradov, Academician

SUBMITTED: December 15, 1960

Card 4/4

RYABCHIKOV, D.I.; KONCHENNAYA, Ye.N.

Complex uranyl dicarbonate. Dokl. AN SSSR 140 no.3:605-606 S '61. (MIRA 14:9)

1. Predstavleno akademikom A.N.Frumkinym.

(Uranyl compounds)

KORCHEMNAYA, Ye.K.; RYABCHIKOV, D.I.; NAUMOVA, V.I.

Separation of small amounts of cerium from the main components of a chromium-nickel alloy. Zav.lab. 28 no.5:539-540 '62. (MIRA 15:6)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo AN SSSR.
(Chromium-nickel alloys) (Cerium--Analysis)

MARCHENKO, N.A.; RAYBER, Z.S.; LIPKO, S.K.; OS'MAKOVA, V.T.; KRYMER, S.Ye.; LOMEKHOV, A.S.; STREL'NIKOVA, N.P.; KORCHEMNAYA, Ye.K.; NAUMOVA, V.I.

Exchange of experience. Zav.lab. 28 no.10:1192-1193 '62. (MIRA 15:10)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina (for Marchenko, Rayber, Lipko). 2. Severnyy nikel'nyy kombinat (for Krymer, Lomekhov). 3. Noril'skiy gorno-metallurgicheskiy kombinat imeni A.P. Zavenyagina (for Strel'nikova). 4. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo (for Korchemnaya, Naumova).

(Chemistry, Analytical)

KORENMAN, Izrail' Mironovich; BUSEV, A.I., red.; KORCHEMNAYA, Ye.K., red.; KASHINA, P.S., tekhn. red.; GUSEVA, A.P., tekhn. red.

[Analytical chemistry of potassium] Analiticheskaia khimiia kaliia. Moskva, Izd-vo "Nauka," 1964. 253 p. (MIRA 17:3)

RYABCHIKOV, D.I., prof., otv. red.; VAGINA, N.S., kand. tekhn. nauk, red.; KORCHEMNAYA, Ye.K., kand. khim. nauk, red.; RUSANOV, A.K., doktor tekhn. nauk, red.; RYABUKHIN, V.A., kand. khim. nauk, red.; SENYAVIN, M.M., kand. khim. nauk, red.; SKLYARENKO, Yu.S., kand. khm. nauk, red.; STROGANOVA, N.S., nauchn. sotr., red.; MAKUNI, Ye.V., tekhn. red.

[Rare-earth elements] Redkozemel'nye elementy. Moskva, Izd-vo AN SSSR, 1963. 391 p. (MIRA 17:2)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii.

GOLOVNYA, V.A., doktor khim. nauk; ELLERT, G.V., kand. khim. nauk; SHUBOCHKIN, L.K., kand. khim. nauk; SHCHELOKOV. R.N., kand. khim. nauk; TSAPKINA, I.V., kand. khim. nauk; TRAGGEYM, Ye.N., kand. khim. nauk; MARKOV, V.P., doktor khim. nau, [deceased]; AJ.TKHANOVA, Z.M.; DYATKINA, M.Ye., doktor khim. nauk; MIKHAYLOV, Yu.N.; TSAPKIN, V.V., kand. khim. nauk; BOLOTOVA, G.T., kand. khim. nauk; CHERNYAYEV, V.A., doktor khim. nauk; KORCHEMNAYA, Ye.K., red.

[Complex compounds of uranium] Kompleksnye soedineniia urana. Moskva, Izd-vo "Nauka," 1964. 488 p. (MIRA 17:7)

1. Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Laboratoriya khimii kompleksnykh soyedineniy aktinidov Instituta obshchey i neorganicheskoy khimii AN SSSR (for all except Korchemnaya).

ZVYAGINTSEV, Orest Yevgen'yevich, prof., doktor khim. nauk;
AVTOKRATOVA, Tat'yana Dmitriyevna, kand. khim. nauk, dots.;
GORYUNOV, Anatoliy Alekseyevich, kand.khim. nauk, assistent;
KOLBIN, Nikolay Ivanovich, kand.khim.nauk, dots.;RYABOV,
Al'ber Nikolayevich, kand. khim. nauk, assistent; KORCHEMNAYA,
Ye.K., red.

[Chemistry of ruthenium] Khimiia ruteniia. [By] O.E.Zviagintsev i dr. Moskva, Nauka, 1965. 299 p. (MIRA 18:6)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova (for Kolbin, Ryabov, Goryunov). 2. Moskovskiy institut stali i splavov(for Avtokratova).

PESKOV, N., starshiy master; BURDIN, A., starshiy master;
KORCHEMNYY, A., kalibrovshchik

New shape of a periodic plowshare band for agriculture.
Metallurg 7 no.7:29-31 Jl '62. (MIRA 15:7)

1. Sortoprokatnyy tsekh Kuznetskogo metallurgicheskogo kombinata.
(Plows)

PESKOV, N.I.; OSOKIN, V.A.; KORCHEMNYY, A.M., kalibrovshchik

Changing the grooving of the first stand on the 360 mill. Metallurg 7 no.4:29-31 Ap '62. (MIRA 15:3)

1. Starshiye mastera Sortoprokatnogo tsekha Kuznetskogo metallurgicheskogo kombinata (for Peskov, Osokin). 2. Sortoprokatnyy tsekh Kuznetskogo metallurgicheskogo kombinata (for Korchemnyy).
(Rolling mills)

KORCHEMNYY, G.M., inzhener.

Conference of directors and chief engineers of insulator plants. Vest.elektroprom. 27 no.5:69-70 My '56. (MLRA 9:12)

1. Gosudarstvennyy issledovatel'skiy elektro-keramicheskiy institut Ministerstva elektricheskoy promyshlennosti.
(Electric insulators and insulation)

KORCHEMNYY, G.M., inzhener.

Meeting of innovators convened by the Main Administration of the Electric Insulation Industry. Vest.elektroprom. 27 no.1: 77-80 Ja '56. (MLRA 9:6)

1.GIEKI Ministerstva elektropromyshlennosti.
(Electric insulators and insulation)

KORCHEMNOY, L.V.

Stands with closed contours for testing transmission cases.
Avt. trakt. prom. no.5:16-17 My '55. (MIRA 8:8)

1. Ural'skiy avtozavod imeni Stalina
(Tractors--Transmission devices)

KORCHEMNYY, L.V.

Stand testing of steering knuckles of the ZIS-5 automobile for fatigue. Avt.i trakt. prom. no.5:12-13 My '56. (MLRA 9:8)

1. Ural'skiy avtozavod imeni Stalina.
(Automobiles--Steering gear)

AUTHOR: Korchemnyy, L.V. SOV-113-58-8-18/21

TITLE: The Analysis of the Operating Process of an Engine Based on a Formal-Geometric Construction of the Indicator Diagram's Line of Combustion (Ob analize rabochego protsessa dvigatelya na osnove formal'no-geometricheskogo postroyeniya linii sgoraniya indikatornoy diagrammy)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 47-48 (USSR)

ABSTRACT: This is a review of a book by Yu. B. Sviridov, "The Influence of the Combustion Process Parameters on the Engines Indicator Indices" in the Works of the Laboratoriya dvigateley (Laboratory of Engines) series, published by the AS, USSR, in 1957.

ASSOCIATION: NAMI

1. Engines--Operation 2. Engines--Analysis 3. Combustion--Analysis

Card 1/1

KALACHEV, L.D., kand.tekhn.nauk; KORCHEMNYY, L.V.; LAPIDUS, V.I., kand.tekhn. nauk; ADAMOVICH, A.V., kand.tekhn.nauk; CHAPKEVICH, V.A., kand.tekhn. nauk; DYMSHITS, I.I., kand.tekhn.nauk; KONEV, B.F.

"Design and construction of machines." Reviewed by L.D. Kalachev and others. Avt. prom. no.2:47-48 F '59. (MIRA 12:3)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Machinery) - (Automobiles)

12(2) SOV/113-59-4-7/19

AUTHOR: Korchemnyy, L.V.

TITLE: The Calculation of Engine Valves

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 14-17 (USSR)

ABSTRACT: The author presents formulas and equations for calculating cams of valve mechanisms. He based his paper on German and American sources. There are 5 diagrams, 1 graph and 3 references, 1 of which is Soviet, 1 German and 1 English.

ASSOCIATION: NAMI

Card 1/1

KORCHEMNYY, L.V., insh.; GORDEYEVA, L.P., tekhn.red.

[Kinematics of gas-distribution cam gears] Kinematika kulachkovykh mekhanizmov gazoraspredeleniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostr. lit-ry, 1960. 35 p. (Moscow. Gosudarstvennyi nauchno-issledovatel'skii avtomobil'nyi i avtomotornyi institut. [Trudy], no.89). (MIRA 13:7)
(Cams) (Automobiles--Fuel systems)

KORCHEMNYY, L.V.

Selecting the reciprocal position of the valve and rocking arm of the engine. Avt.prom. no.9:14-16 S '61. (MIRA 14:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Automobiles--Engines--Valves)

KORCHEMNYY, L.V.

Some characteristics of the kinematics of a push rod with a flat disk. Avt.prom. 28 no.4:7-9 Ap '62. (MIRA 15:4)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut. (Cams)

KORCHEMNYY, L.V.

Investigating the kinematics of flat cam gears with a variable curvature of the profile of the follower. Trudy Inst.mash.Sem.po teor.mash.i mekh. 23 no.91:67-79 '62. (MIRA 15:9)
(Cams)

KORCHEMNYY, L.V.; GUTERMAN, I.I., kand. tekhn. nauk, red.; YEGORKINA, L.I., red.izd-va; DEMKINA, N.F., tekhn.red.; MAKAROVA, L.A., tekhn. red.

[Mechanism of the gas distribution in an engine; kinematics, dynamics, strength calculation] Mekhanizm gazoraspredeleniia dvigatelia; kinematika, dinamika, raschet na prochnost'. Moskva, Mashinostroenie, 1964. 209 p. (MIRA 17:3)

KORCHEMNYY, L.V.; TAMARLAKOVA, T.N.

Effect of the curvature radius of the supporting surface of a follower on the performance of gas-distribution cam mechanism. Avt.prom. 29 no.12:9-12 D '63. (MIRA 17:4)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.

KORCHEMNYY, L.V.

Effect of random errors in the profile of a cam on the dynamics of the valve mechanism of an engine. Trudy Inst. mash., STMP no. 19:13-21 '65 (MIRA 19:1)

Kobyzev, V. K., jt. au. Advanced methods and steps in the work of Kuznetsk sheet-rolling mill operators Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1952. 43 p. (54-40372)

Ts340.K59

KORCHEMNYY, M.I.

137-58-5-9484

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 96 (USSR)

AUTHORS: Golubev, T.M., Khaykov, M.A., Sakharov, G.A., Danilov, L.I., Shamets, Ya.V., Korchemnyy, M.I.

TITLE: Reductions and Pressures Employed in Rolling on a Medium-gage Sheet Mill (Rezhim obzhatiy i usiliya pri prokatke na srednelistovom stane)

PERIODICAL: Sb. tr. Kuznetskogo mezhobl. pravl. Nauchno-tekhn. o-va chernoy metallurgii, 1956, Vol 1, pp 79-95

ABSTRACT: The results of an investigation of reduction (RE) schedules on a 2150 2-stand three-high Lauta mill with 850/560/850 mm rolls are presented. Analysis of the temperature of rolling (R) and the pressures and actual RE schedules in the R of 1150-1800 mm wide sheets of St. 3, St. 4, 65G, 1Kh18N9T and SKhL4 steels from slabs 80-220 mm wide established that actual R schedules do not reveal any differentiation in RE with width of sheet as envisaged in the technical instructions. Differentiation of actual RE in accordance with the grades of steel being rolled is observed to be correct. R of sheet of ShKh15 and 65G steels is done in accordance with the technical instructions, while Nrs 3 and 4

Card 1/2

Reductions and Pressures Employed (cont.)

steels are rolled by more intensive and 1Kh18N9T and SKhL steels by less intensive regimes. When billets <20-30 mm thick are being R, it is necessary to maintain uniform RE and therefore to hold the maximum thickness of the work going into the second stand within these limits. It is suggested that analysis of rational RE regimes be performed in accordance with the equation: $\Delta h = 2P_r^2 D \cdot B_0^2 \cdot p^2$, where Δh is the absolute RE, B_0 is the thickness of the sheet in m, D is the mean rolling diameter of the rolls; p is the unit rolling pressure and P_r is the R stress permissible in terms of fatigue strength and housing service life. An example is presented of the calculation of an RE schedule in the R of 1Kh18N9T steel to a 6x1700-mm sheet.

M. Z.

1. Rolling mills--Performance

Card 2/2